

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1-33 (canceled).

34. (Currently amended) An apparatus comprising a circuit that monitors a cumulative amount of charge associated with a power supply, wherein power is removed from a load so that the load receives no power when the cumulative amount of charge is at least equal to a predetermined value from a profile of said values that decrease in magnitude during application of power to said load.

35. (Previously presented) The apparatus of claim 34 wherein the load is a motor.

36. (Previously presented) The apparatus of claim 34 further comprising drivers that are disabled responsive to the cumulative amount of charge being at least equal to the predetermined value.

37. (Previously presented) The apparatus of claim 34 wherein the predetermined value is based on an amount of charge that will cause a spike when the amount of charge is removed from the power supply.

38. (Previously presented) The apparatus of claim 34 wherein the cumulative amount of charge is monitored with an integrative device.

39. (Previously presented) The apparatus of claim 34 wherein the load is an inductive type.

40. (Previously presented) The apparatus of claim 34 wherein the circuit minimizes a spike on the power supply.

41. (Currently amended) A system comprising:

a motor coupleable to a power supply;

a sensor coupleable to the motor; and

a control circuit including a comparator coupled between an input and an output, the

input being coupleable to the sensor, wherein the control circuit provides an

output signal on the output responsive to an amount of charge provided from

the power supply that is at least equal to a predetermined threshold, the

predetermined threshold selected from a profile of said thresholds that

decrease in magnitude during application of power to said motor.

42. (Previously presented) The system of claim 41 wherein the control circuit includes an integrator coupled between the input and the output.

43. (Cancelled).

44. (Currently amended) The system of claim 41 ~~43~~ wherein the comparator is a one-shot type.

45. (Previously presented) The system of claim 41 further comprising motor drivers that are coupleable to the motor and the output, wherein the motor drivers are controlled responsive to the output signal.

46. (Previously presented) The system of claim 45 wherein the motor drivers are disabled responsive to the amount of charge being at least equal to the predetermined threshold.

47. (Currently amended) A method comprising the steps of:
monitoring a charge amount being removed from a power supply; and
decoupling the power supply from a load so that the load receives no power
responsive to the charge amount being at least equal to a predetermined level
selected from a profile of said levels that decrease in magnitude during
application of power to said load.

48. (Previously presented) The method of claim 47 wherein the load is an inductive type.

Claims 49-50 (canceled).

51. (Previously presented) The method of claim 47 wherein the power supply is decoupled from the load for a predetermined time.

52. (Previously presented) The method of claim 47 wherein the amount of charge being removed from the power supply of the monitoring step is monitored by sensing an amount of current flowing through the load.

53. (Previously presented) The method of claim 52, wherein the monitoring step further comprises accumulating charge in relation to the sensed amount of current flowing through the load.

54. (Previously presented) The apparatus of claim 35, wherein the profile is applied during acceleration of the motor to an operational velocity.

55. (Previously presented) The system of claim 41, wherein the profile is applied during acceleration of the motor to an operational velocity.

56. (Previously presented) The method of claim 47, wherein the load of the decoupling step comprises a motor, and wherein the profile is applied during acceleration of the motor to an operational velocity.

57. (New) A system comprising:
a motor coupleable to a power supply;
a sensor coupleable to the motor; and

a control circuit including an integrator coupled between an input and an output, the input being coupleable to the sensor, wherein the control circuit provides an output signal on the output responsive to an amount of charge provided from the power supply that is at least equal to a predetermined threshold, the predetermined threshold selected from a profile of said thresholds that decrease in magnitude during application of power to said motor.

58. (New) The system of claim 57, further comprising motor drivers that are coupleable to the motor and the output, wherein the motor drivers are controlled responsive to the output signal.

59. (New) The system of claim 58, wherein the motor drivers are disabled responsive to the amount of charge being at least equal to the predetermined threshold.

60. (New) The system of claim 57, wherein the profile is applied during acceleration of the motor to an operational velocity.